

Title (en)

Moving magnet actuator with counter-cogging end-ring and asymmetrical armature stroke

Title (de)

Beweglicher magnetischer Aktor mit gegenverzahntem Abschlussring und asymmetrischem Ankerhub

Title (fr)

Actionneur magnétique en mouvement avec collier d'ensouple à denture et course d'armature asymétrique

Publication

EP 1835602 A3 20131218 (EN)

Application

EP 07405072 A 20070307

Priority

- US 74346306 P 20060313
- US 60820006 A 20061207

Abstract (en)

[origin: EP1835602A2] A moving magnet actuator (MMA) includes a magnetically conductive end-ring (48) that is spaced from a magnet pole piece (18). The end-ring is constructed and spaced to provide a desired counter or anti-cogging force when the MMA is in a powered state. The MMA is also constructed such that a central portion of its armature stroke is axially displaced from a radial centerline of the magnetically conductive conduit enclosing the MMA components.

IPC 8 full level

H02K 33/16 (2006.01)

CPC (source: EP US)

H01F 7/1615 (2013.01 - US); **H02K 33/16** (2013.01 - EP US)

Citation (search report)

- [XA] EP 1298363 A2 20030402 - ISUZU MOTORS LTD [JP]
- [X] US 5896076 A 19990420 - VAN NAMEN FREDERIK T [US]

Cited by

CN109448950A; CN109450219A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1835602 A2 20070919; EP 1835602 A3 20131218; EP 1835602 B1 20160810; JP 2007251166 A 20070927; US 2007210653 A1 20070913; US 2014028420 A1 20140130

DOCDB simple family (application)

EP 07405072 A 20070307; JP 2007059629 A 20070309; US 201314042308 A 20130930; US 60820006 A 20061207